



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,382	12/04/2003	Ronald Donald Stead	SRM-101-A	7411
21770	7590	11/09/2005	EXAMINER	
CHARLES W CHANDLER 33150 SCHOOLCRAFT LIVONIA, MI 48150			LAWRENCE JR, FRANK M	
			ART UNIT	PAPER NUMBER
			1724	
DATE MAILED: 11/09/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,382

Applicant(s)

STEAD, RONALD DONALD

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005 and 30 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Claim 10 is objected to because of the following informalities: In line 20 of claim 10, "we" should be changed to "wet". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 4 recites the limitation "the inner chamber" in line 2. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 5 recites the limitation "the output shaft" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 2-5, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Roe (3,645,070).

Art Unit: 1724

8. Roe '070 teaches a gas washer system comprising a housing (14) with an internal chamber (12), an air inlet tube (22) for receiving air into the chamber, an air outlet (82) for passing filtered air from the chamber, a container (45) for holding water adjacent the chamber, a motor (40) on the housing connected to an output shaft rotating on an axis, a fan means (88) connected to the motor via a pulley drive (38) for passing air from the inlet toward the outlet, an elongated vertical tube (32) with a hollow core connected to the shaft and motor for rotation about the axis and having a lower inlet (42) disposed in the water and perforations above the water level connected to pipettes (52) for spraying water centrifugally from the tube into air passing through the chamber and upwardly along the tube, and a squirrel cage rotor (62) connected to the tube for deflecting particles, wherein the inlet tube has an outlet in the chamber for passing air from the inlet to impact the water surface (see figures, col. 1, lines 4-8, col. 2, line 18 to col. 3, line 37). Particles in the gas flow become water laden in a shroud formed by water issuing from the pipettes and are collected in the chamber.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roe '070 in view of Glenn (5,578,113).

11. Roe '070 discloses all of the limitations of the claims except that there is a filter in the air path between the chamber and the outlet. Glenn '113 discloses an air treatment system having a

Art Unit: 1724

HEPA and charcoal filter in the outlet (figures 1, 4, 5, col. 6, lines 14-35). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Roe '070 by including a HEPA and charcoal filter in the outlet in order to provide a means for removing odor and microscopic particulates from the air flow.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roe '070 in view of Huang (6,196,527).

13. Roe '070 discloses all of the limitations of the claim except that there is an aromatic means for aromatizing air passing through the outlet. Huang '527 discloses an air humidifier having a perfume holding member (5) for aromatizing air passing through the humidifier outlet (figure 5, abstract, col. 1, lines 39-57). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Roe '070 by including an aromatic means in the outlet in order to provide the additional function of adding a pleasing fragrance to the environment.

14. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roe '070 in view of Müller (6,179,903).

15. Roe '070 discloses all of the limitations of the claim except that the motor is a brushless motor. Müller '903 discloses an air cleaner having a brushless blower motor (5) (see col. 4, lines 6-14). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the device of Roe '070 by using a brushless motor in order to provide a motor that avoids the abrasion of carbon brushes and has a long service life because of a higher pressure operation.

Allowable Subject Matter

16. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

17. Applicant's arguments filed August 29, 2005 have been fully considered but they are not persuasive. Applicant's arguments pertaining to the Katzman patent are found persuasive because the patent fails to disclose particle removal from the air stream and the spraying of mist from the tube openings into air containing wetable pollutants that is flowing upwardly adjacent the tube. Roe discloses these features however, as described in paragraph 8 above. Water exiting the openings and pipettes in the tube (32) flows directly into pollutant containing air flowing upwardly around the tube, and indirectly after being deflected into a mist shroud formed around the tube.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to Harris (2,218,198) discloses an air conditioning device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
Art Unit 1724

Frank Lawrence

11-4-05

fl